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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,706	10/04/2000	David C. Gelvin	08-880-US5	2275
20306 7590 06/25/2009 MCDONNELL BOEHNNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606				
EXAMINER BRUCKART, BENJAMIN R				
ART UNIT		PAPER NUMBER		
2446				
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06/25/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/684,706

**Applicant(s)**

GELVIN ET AL.

**Examiner**

BENJAMIN R. BRUCKART

**Art Unit**

2446

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63, 65-81, 83-85, 91, 92, 94, 95, 97, 99-101, 103, 106 and 108-119 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 5/19/09 and 3/20/09  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are 1-63,65-81,83-85,91,92,94,95,97,99-101,103,106 and 108-119.

#### **DETAILED ACTION**

Claims 1-32, 34-63, 65-81, 83-85, 91, 92, 94, 95, 97, 99-101, 103, 106 and 108-119 are pending.

Claims 1, 63, 80, and 83-85, 92, 95, 97, 101, 103, 106, and 112 are in independent form.

Claims 33, 64, 82, 86-90, 93, 96, 98, 102, 104, 105, and 107 are cancelled.

Claims 1, 83-85, 92, 97, 101 and 103 are amended.

Applicant's attention is drawn to the new examiner of record (see correspondence information below).

#### **Election/Restrictions**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-32, 34-62; 63, 65-79;; 83; 92, 94; 101, 103; 112-119 drawn to a sensor network for distributing data based on resource cost and message priority and distribution varies dynamically based on message priority, classified in class 709, subclass 240.
- II. Claim 80-81, drawn to a sensor network to configure processors for different handling of signal processing and to cycle in and out of a sleep state, classified in class 709, subclass 220.
- III. Claim 84, drawn to a sensor network to distribute data with a first processor and a second processor, the second processor to handle signal processing and to cycle in

and out of a sleep state for synchronizing data sets, classified in class 709, subclass 248.

- IV. Claims 85, 91, drawn to a sensor network that transmits data using message packets aggregated into compact forms and aggregation protocols, classified in class 709, subclass 247.
- V. Claim 95, drawn to a sensor network that processes data and makes a decision and forwards a summary message based on that decision; where data is stored or routed in response to energy detection, classified in class 709, subclass 238.
- VI. Claims 97, 99-100, drawn to a sensor network that re-routes data on redundant paths in response to a failure, classified in class 709, subclass 239.
- VII. Claims 106, 108-111, drawn to a network of elements configured to be self-assembled into a multi-cluster network and to select a base node and a remote node of a particular cluster number, classified in class 709, subclass 223.

Inventions I - VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as distribution based on message priority. In the instant case, subcombination II has separate utility such as configuring different computer components for handling processes. In the instant case, subcombination III has separate utility such as synchronizing data among different sets of nodes with varying processor and timing. In the instant case, subcombination IV has separate utility such as aggregating data in packets

according to aggregation protocols. In the instant case, subcombination V has separate utility such as decision making and forwarding summaries based on energy and priority. In the instant case, subcombination VI has separate utility such as re-routing based on failover. In the instant case, subcombination VII has separate utility such as cluster designation of numbers locally and remotely. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either

instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### **REMARKS**

Applicant has filed a terminal disclaimer but not made suggested changes to certain independent claims to put the case in condition for allowance.

The provisional double patenting rejection will likely remain on claim group I as it will not be the only rejection on that set of claims.

#### **Conclusion**

A shortened statutory period for reply to this final action is set to expire ONE MONTH from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 9:00-5:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin R Bruckart  
Examiner  
Art Unit 2446

/Benjamin R Bruckart/  
Primary Examiner, Art Unit 2446